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April 1947

Consumers' guide



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More Grain For The Hungry

Grain and more grain—from the fields of the American farms is again acutely needed by tens of millions of the world's hungry. To many of these individual millions, wasted by several years of near starvation diets, the need is more drastic than ever before. It is good to know that by the end of this month this country will have shipped 400 million bushels of grain and flour. And best of all, this grain has been shipped 2 months ahead of the schedule which called for the delivery of this amount by the end of June.

But even these gigantic movements of our grain are not adequate. There must be enough to fill the void in the world's food basket. This must be filled if the peoples of western Europe and the British-American zones of German occupation are to get back on their feet so that they can produce and make their own way in the world again. Until the reestablishment of some economic order is brought out of the present chaos, these people will remain impotent, and stay in continuous need of the meager rations of grain to hold bodies and souls together.

In fact, because of the practically complete break-down of their economic and physical ways of life, and the slowness of recovery during the past year, we find the food situation at almost the same stage of crisis as it was last year.

In western European countries outside Germany, there has been some improvement as compared to last year at this time. However, gains in some areas have been offset by losses in others. For example,

food consumption in the United Kingdom is from 5 to 10 percent less than it was last year and during the war. Although the cuts in rationing in the United Kingdom have not yet adversely affected the health of the average Britisher, who is in better shape physically than before the war, further cuts would slow down the badly needed production of British workers.

On the world's per capita food supply the United States Department of Agriculture's Office of Foreign Agricultural Relations states that in 1946-47 food production was about equal to that of 1935-39. However, offsetting that are other factors. The world's population has increased by 7 or 8 percent. And another fact, during the 1935-39 period the world was by no means up to the standard which nutritionists regard as a minimum for health. With this increased demand came greater purchasing power in this country and other nations such as Mexico and Brazil where consumer incomes increased due to enlarged industrialization.

A relatively small cut in the world per capita consumption of food might not seem alarming. But the point is that the decrease is not distributed evenly. In the United States, the Bureau of Agricultural Economics estimates that in 1947 the average American will have about 3,400 calories a day. That is 5 percent above his prewar average. This means that the rest of the world's per capita consumption is cut a greater percentage than the 7 or 8 percent loss indicates.

What are the basic reasons behind this sustained world food crisis which makes it more severe and continuing than the hunger that followed World War I?

It's principally due to the fact that World War I was not a world war in the sense that World War II was.

The toll taken by the recent war in devastated areas in Europe, Russia and North Africa were vast compared to much smaller areas over which the battles of World War I raged. The whole of the Far East which was engulfed in World War II was untouched by World War I. At that time there were great surpluses of food piled up in Siam, Burma, Netherlands, East Indies and the Philippines, but there was a shortage of ships to move it. So it was ready for shipment abroad as soon as the armistice made boats available.

In the Far East today shortages prevail instead of surpluses. In 1920 Siam, Indo China, and Burma exported over 400 million tons of rice. Last year their exports were about a million tons. This year only 2 million tons of rice will be exported from there as compared to 4 million tons before the war. This means that the people who had consumed their grain in the form of rice must draw upon the world supply of wheat and other cereals.

In 1920, we imported nearly 150 million tons of sugar from the Philippines. By the beginning of World War II we were taking a million tons a year. But now the Philippines instead of being an exporting country must import sugar for its own use.

In addition to the widespread devastation and paralysis of production brought about by the war, the recent postwar months have seen inroads made on potential food supplies by drought and floods in areas where the food is most needed. The recent severe winter, the worst in many years, struck Europe, damaged the winter wheat of France and almost paralyzed transportation of the small supplies available.

So it is that Europe looks forward to meager supplies between now and this year's harvest.

The Editor

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Editor, Ben James; associate editors, Anne Carter, Elizabeth Spence; art, K. J. Burdette.

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what? why? how?

- **Why is potato consumption per capita declining?**
- **What are the possibilities of developing air transportation for tropical and subtropical fruits?**
- **What is the dollar-and-cent value of the nutrients contained in the different foods we eat?**
- **What varieties of cotton are best suited for the manufacture of sheeting?**
- **Why can't stores in small towns and villages handle fresh vegetables on a year-round basis the same as stores in the big cities?**

• The Research and Marketing Act of 1946, passed by Congress last summer, may provide the answers to these and many other questions that affect our welfare. The new legislation authorizes agricultural research at all stages of the marketing process—from the farm to the retail store—and backs up this expanded program by authorizing appropriations starting at 9½ million dollars in 1947 and reaching 61 million dollars in 1951. Significantly, the act is a clear recognition that farm products have not really been marketed until they reach the ultimate consumer.

The act authorizes additional funds to State agricultural experiment stations, the amounts authorized starting with 2½ million dollars in 1947 and increasing to 20 million dollars in 1951. In authorizing these funds, the act places special emphasis on marketing and regional research by the experiment stations. If we can judge the future by the past, this will be money well spent.

For example, scientists at the New Jersey station discovered streptomycin, which is more effective in the treatment of some diseases than penicillin or the sulfa drugs. At the California station, the crossing of commercial cantaloup varieties with disease-resistant strains eliminated powdery mildew and saved a great industry from extinction. At the New York (Cornell) station, artificial insemination studies have made it possible to spread the good qualities of superior sires over the herds of the State, thus making for increased returns to dairymen and more milk at a lower cost to consumers. Broadcasting and plowing down 1,200 pounds per acre of 5-10-10 fertilizer before setting the plants has given consistent yield increases of approximately

1 ton of tomatoes per acre in experiments by the Delaware station over yields obtained by the usual practice of broadcasting the fertilizer on top of the ground. By adopting research results of the Missouri station on the improvement and development of pastures, farmers in that State have been able to step up the pasture season from 6 months to 7½ months, which means additional feed equivalent to 37 million bushels of corn. And so it goes. Each research project makes its contribution to better living.

A second authorization for appropriations for research on utilization of agricultural products starts with 3 million dollars in 1947 and reaches 15 million dollars in 1951. This will permit expansion of research in a field where considerable headway already has been made.

During the war, scientists at the Northern Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry of the United States Department of Agriculture at Peoria, Ill., quickly increased the yield of penicillin by feeding the drug-forming mold a diet of corn-steeping liquor and lactose. About 12 million pounds of the corn-steeping liquor, a byproduct from the manufacture of corn starch, and 6 million pounds of lactose, or milk sugar, are now used annually in the manufacture of penicillin.

The lowly buckwheat plant is being used by chemists in the Eastern Laboratory at Wyndmoor near Philadelphia, Pa., to produce a drug called rutin, which gives promise of being beneficial in treating persons who are suffering from high blood pressure associated with increased capillary fragility. It is estimated that about 10,000 pounds of rutin, extracted from the leaves and blossoms of the green buck-



An agricultural marketing inspector grades grapefruit sections at a canning plant using the continuous inspection of the United States Department of Agriculture.



Scientists at the Northern Research Laboratory perfected method for increasing the yield of penicillin by feeding the mold on a new diet of farm products.



Technologist at the Southern Regional Research Laboratory conducts tests to show what types of cotton and what yarn structure are best adapted for certain uses.

wheat plant will be required to meet the experimental demand for the drug this year, and more than 1,000,000 pounds a year to meet medicinal requirements should the present promising results be borne out. This would mean that about 50,000 acres of buckwheat would be needed each year for the production of the drug.

At the Southern Laboratory, New Orleans, La., research has resulted in the production on an experimental scale of a peanut-protein fiber. Called Sarelon, the fiber has a light cream color and a softness somewhere between that of silk and wool. It takes dyes similar to those used on silk and wool and shrinks very little in hot



Research at the Eastern Regional Laboratory, Philadelphia, made possible commercial manufacturing of rutin, a drug of value in treating fragile and weakened capillaries.



This Market News Wire Room is the focal point in distribution of United States Department of Agriculture news to the nation's principal terminal markets and shipping points.

water. It resembles wool also in its heat-insulating and moisture-absorbing properties. Its major weakness is its low wet strength.

Velva Fruit, an ice-cream-like product that can be made from fully ripened fruit, much of which is lost because it is frequently too soft for shipment, is a new development in the food field. Several hundred thousand gallons of this delicious whole-fruit dessert have been made and sold commercially—a direct result of research at the Western Laboratory, Albany, Calif.

A third appropriation authorized under the Research and Marketing Act starts at 1½ million dollars in 1947 and increases to 6 million dollars in 1950. This is a special fund available to the Department for use in cooperation with the State agricultural experiment stations. It could be used for regional projects, such as the breeding of livestock, weed control, and the development of safeguards for the use of new and powerful insecticides.

A fourth appropriation to conduct marketing research and marketing services on a greatly expanded scale is authorized, the appropriations authorized starting at 2½ million dollars in 1947 and reaching 20 million dollars in 1951. This part of the act declares it to be the policy of Congress to promote a "scientific approach to the problems of marketing, transportation, and distribution similar to the scientific methods which have been utilized so successfully during the past 84 years in connection with the production of agricultural products."

Consumers will be interested in a provision that will make for improved standards of quality. Most consumers, frankly speaking, are not good judges of quality, even when the product can be looked over in the store, as in the case of meats. If the product is in a container, as in the case of canned fruits and vegetables, consumers are at an even greater disadvantage. Thus many buyers want the name of the grade to be their guide to quality. This is a simple matter if the mark, tag, or certificate stays on or with a product until it reaches the consumer. Many "consumer grades" are available now, such as for meats, poultry, eggs, butter, fresh and processed fruits and vegetables, dry beans and peas, rice, and honey. The Research and Marketing Act is designed to improve and popularize this service.

Consumers are specifically singled out for attention in the marketing section of the act. One provision definitely authorizes and directs the Secretary of Agriculture "to conduct and cooperate in consumer education for the more effective utilization and greater consumption of agricultural products."

Many of the other provisions that have to do with research in the marketing field may appear, at first glance, to have little relation to the welfare of consumers. Research in market news, warehousing, transportation, interstate trade barriers, statistics, and the like apparently are of interest only to shippers, warehousemen, wholesalers, jobbers, retailers. But such research has the primary purpose of reducing handling charges. Smaller handling charges, of course, generally mean lower prices to consumers and increased returns to producers.

The act provides for an 11-man National Advisory Committee. The membership of this committee is as follows: Howard E. Babcock, New York State farmer, writer, and chairman of the board of trustees, Cornell University; Fred Bailey, legislative counsel for the National Grange; Robert R. Coker, vice president of a large South Carolina seed company; John H. Davis, executive secretary of the National Council of Farmer Cooperatives; Charles F. Kettering, general manager of the Research Laboratory Division, General Motors Corporation; C. W. Kitchen, executive vice president of the United Fresh Fruit and Vegetable Association; Albert K. Mitchell, New Mexico rancher and student of livestock marketing problems; James G. Patton, president of the National Farmers Union; Walter L. Randolph, president of the Alabama Farm Bureau Federation; H. J. Reed, dean and director of the Purdue University School of Agriculture; and Kerr Scott, State Commissioner of Agriculture, North Carolina.

Committees for specific commodity groups are also provided for in the act. These are being formed in order to provide broader representation of the many groups that have a keen interest in agricultural research.

This, then, is the broad outline of the Research and Marketing Act of 1946. It is an act that provides for research to further the welfare of, not just producers and not just consumers, but of all the people of the Nation.

Consumers' guide

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When you choose cheese



You'll find more variety than you've seen in years. Cheese experts have been busy learning better ways to make better cheese. Consumers can profit by their findings.

• We ate more cheese in the early years of the war than ever before in our history—6.3 pounds per person was the national high score.

Of course it can't be honestly said that this cheese feast was spontaneous. Meat was rationed—remember—and cheese wasn't. Thousands of us learned perforce what nutritionists had been saying for years, that cheese makes a good main dish for any meal, gives the body high quality protein like meat, eggs and fish, and adds calcium and B-vitamins to the diet.

We learned too, what gourmets and tastewise folks had long known, that cheese is not just *cheese*—a substance to put in a sandwich or on top of macaroni—but several different foods, their flavor and consistency ranging all the way from soft, delicate creaminess to firm, sharp zestiness, any of which could add delight to ordinary menus.

We really learned to love our cheese, it seems, for although we had much less—only 4.9 pounds per capita—in 1944 when

overseas demands rose to their peak, in 1946 when our supplies increased we broke our previous record of cheese-eating by getting away with 7.0 pounds apiece. And prognosticators say we'll probably eat as much in 1947.

Cheese was an important part of our soldiers' rations, and Uncle Sam saw that the cheese they got was of high quality. It was easy to acquire a taste for it. As a result the preferences of some of the 11 million new civilians have helped to raise our average.

Cheddar, The Favorite

By far the favorite in this cheese show is Cheddar or "American." Of the 7 pounds of cheese of all kinds we ate in 1946, American Cheddar accounted for 4.8 pounds leaving 2.2 pounds for all other varieties.

Cheddar gets its name from the English village of Cheddar, Somersetshire, where tradition says, it was first produced more than a hundred years ago. Made of cows' milk, it comes in various sizes from 8 to 100 pounds in weight. The trade has names for these sizes: Daises, Cheddars, Young Americas, Squares, and Longhorns. Cheddar may be yellowish-white or colored a deeper yellow. It is generally made from whole milk, and whole-milk Cheddar must contain not less than 50 percent milk fat in the solids; it can be made from partly skimmed or skim milk, but if made thus it cannot be marketed as Cheddar, but must carry some qualifying adjective such as "part-skim" or "skim." It may

be almost fresh or thoroughly ripened and, as the technicians say "broken down." This means that the ripening process changes the lumpy, curdy texture to one that is firm but pliable and mellow—and the flavor "tangier"—as aging progresses.

Aging Cheddar cheese to the point of "sharpness" formerly took from 8 months to a year. Mild-flavored American required 4 to 7 months. But cheese-curing time can now be cut nearly in half, with the pasteurized milk product, thanks to a method recently described by research workers in the Bureau of Dairy Industry in the Department of Agriculture.

These scientists found that the pasteurized-milk cheese held in the curing room at 60° Fahrenheit was as fully ripened in from 3 to 4 months as cheese held at 50° or lower for 6 months, provided the cheese was made from milk that was of good quality, that had been pasteurized. The cheese held at the higher temperature also developed more and better flavor than the cheese held at the lower temperatures. The method is an outgrowth of earlier work which demonstrated that the use of pasteurized milk was an important step in producing cheese that would be uniformly high in quality. Pasteurization was adopted by many cheese makers during the war years.

Help for Housewife

Some progressive manufacturers of Cheddar are now bringing it out in half-pound, pound, and 2-pound packages, rectangular

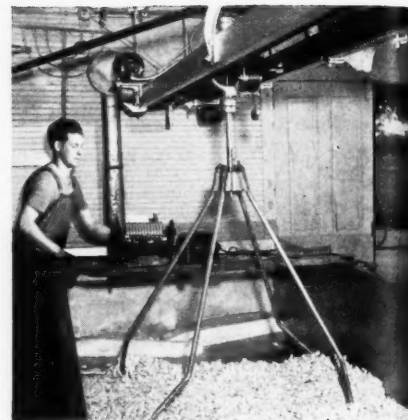
The Farmers' Stake

In Cheese Production

In 1946 cheese made in this country used 11 billion pounds of milk. Farmers received approximately 375 million dollars. Food value and flavor variety are the homemakers' chief interest in cheese. How great that interest is makes a difference to the farmer, for milk sold to make cheese represents a sizable part of his income. About 10 pounds of milk go into every pound of cheese.



Here milk is on its way to becoming Cheddar cheese. Slabs of curd from which all the whey has been drained are turned repeatedly until proper amount of acid is formed.



Slabs are run through curd mill where mechanical curd fork cuts them into small bits.

and easy to slice. This is a welcome move, for how to store the partially used wedge of cheese until next time has always been a problem. The new packages are wrapped in foil or transparent film and heat sealed.

Second on the list of consumer preferences for cheese come Cream and Neufchatel. Statistics on these two varieties are combined, since the products are similar except as to creaminess. Both come in small tin-foil- or cellophane-wrapped packages and are best when eaten a few days after they are made. Genuine cream cheese is made from a mixture of milk and cream thickened by souring and by the addition of rennet to aid curdling. Neufchatel is made from whole milk with less cream added.

According to the Definitions and Standards of Identity for foods of the Food and Drug Administration, Cream cheese must contain not less than 33 percent milk fat, and not more than 55 percent moisture. Neufchatel must contain not less than 20 percent milk fat and not more than 65 percent moisture. All of which is just to say that Cream cheese is richer.

Newcomers in the top ranks of cheese preferences are the Italian types which in 1945 reached third place. Before the war we imported 21 to 25 million pounds of cheese annually from Italy, and domestic production was comparatively small. Demand for both the hard and soft varieties of Italian cheese persisted and production increased rapidly when imports were cut off. Wisconsin, New York, and Michigan are the largest producers of Italian types.

Parmesan, known to many as the inseparable companion to Italian spaghetti, is an extremely hard cheese which will keep for years. Almost impossible to cut, it can be broken and grated easily. Several

manufacturers now sell small packages of grated American Parmesan. These should be kept tightly closed to retain flavor and quality.

Bel Paese, one of the less known soft cheeses, is being made with great success commercially, following the formula and manufacturing procedure perfected by the Bureau of Dairy Industry. Bel Paese—beautiful country—is the trade-mark of an Italian firm. The American product is called Bel Paese-type and can be best made from pasteurized milk.

Fourth on the list of favorite cheeses is Swiss. Formerly we imported at least half of all the Swiss cheese used in this country. Shoppers made a great to-do about "real" Swiss versus American. Now our cheese manufacturers have learned to make a product equal in quality and flavor to the finest imported Swiss.

Official name for Swiss is *Emmentaler*, for the Canton of Emmenthal in Switzerland, where it was first made. One hundred and fifty to two hundred and twenty pounds is the usual weight of a Swiss cheese. As a rule they are round and flattish—2½ to 3 feet across and 6 to 9 inches thick. Holes or eyes in Swiss cheese are formed naturally from the carbon dioxide that appears in curing and are fairly regular in spacing and shape. They vary from the size of a nickel to that of a half-dollar. Tiny cracks indicate too high fat content but do not usually affect the flavor of the cheese. Pin holes are a sign of poor quality and often a bitter taste.

Curing Swiss cheese takes from 6 to 10 months in Europe and 3 to 6 in the United States. When ready, it has a hard rind and will keep indefinitely. When planning

your market list remember it is better to buy it in small quantities as you use it, unless you have room for a sizable segment of the whole cheese, as it dries out quickly after being sliced.

Unlike Cheddar, which is made from either raw or pasteurized milk, Swiss, so far has not generally been made very successfully from pasteurized milk. Research is continuing for a formula using pasteurized milk. This is important to consumers, since bacteria found in raw milk sometimes survive in cheese.

Pasteurized Milk Preferable

Seven States and at least two cities have regulations requiring the use of pasteurized milk in cheese. California, Illinois, Indiana, New Jersey, New York, and New York City require that cheese be made from pasteurized milk, or held 60 days before distribution if unpasteurized milk is used. Colorado requires that cheese be held 120 days, and Portland, Oreg., 180 days if made from unpasteurized milk.

The Oregon State regulation says that milk used in cheese must be pasteurized if it comes from dairy herds infected with Bang's disease. The regulations cover only Cheddar cheese and the soft types like cottage, except in Indiana and California where they apply to all types.

In 1945 Canada passed a regulation requiring that all milk for Cheddar cheese be pasteurized, or the cheese held for a varying number of days depending on the curing temperature.

According to recent issues of trade papers, dairy specialists in two of the principal cheese producing States—Wisconsin and Minnesota—now are consider-

ing proposed regulations requiring the pasteurization of all milk used for cheese. Representatives of industry, and State and Federal agencies are sponsoring the measure.

Scientists in the Bureau of Dairy Industry have perfected a practical test for determining whether the milk used in making cheese was pasteurized. This Sanders and Sager test is a modification of the phosphatase test commonly used in testing the adequacy of pasteurization in milk. It is so sensitive that the presence of a pint of raw milk in a ton lot of pasteurized milk can be detected from a small sample of the cheese made from the milk. This reliable test is of great importance to industry and the public.

Process Cheese

Process cheese is the name applied to all reworked cheese. American Cheddar, Swiss, brick and Roquefort may all be processed. In general, processing consists of grinding up the cheese—several kinds can be used together—cooking it with certain added salts which "mellow" it and prevent fat separation, and pouring the hot cheese into wrapper-lined molds or into jars or glasses. During the cooking process flavors and condiments such as pimientos and pickles may be added. Basic flavor and texture of the finished product depends mainly on the kind, quality and age of the cheese used, and the length of time and temperature at which it is cooked.

Manufacturers of process cheese are be-

ginning to use the continuous inspection service of the Department of Agriculture. Under war contracts all cheese was produced under continuous inspection and producers found they made a better product more efficiently under those conditions. For the past 6 months one large dairy products company has been making process cheese under continuous inspection, marketing it through one of the great chain food stores. Every package or container is marked with the familiar shield many consumers have learned to look for on canned fruits and vegetables. Inside the shield are the words Processed and Packed Under Continuous Inspection of the United States Department of Agriculture. While this is not a grade it is the buyer's guarantee of a wholesome, clean food.

Cheese Choices

Cheese shoppers this season will have many more than the four top varieties to choose from. In addition to those, and the uncounted variations of process cheese, "cheese foods" and "cheese spreads" they will find several types which for years were almost entirely imported from Europe. American cheese makers have learned to duplicate not only the Italian and Swiss types but many others.

Roquefort, a high favorite, formerly imported from France where it was made of sheep's milk and aged in caves for 5 or 6 months is now successfully produced here from cows' milk and aged under conditions which duplicate the temperature and moisture of the French caves.

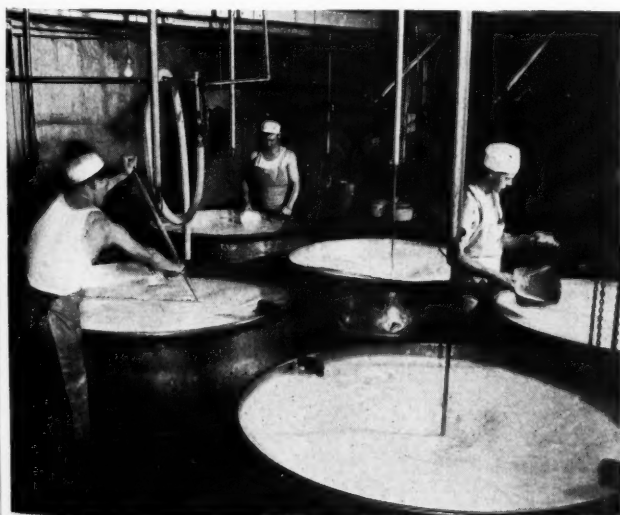
Camembert, another French cheese of the mold-ripened type, has been duplicated so well that even before the war the domestic product had almost replaced imports.

Edam and Gouda from Holland, are semihard, yellow cheese made of cow's milk. Sold in the familiar flattened red sphere, connoisseurs are welcoming the domestic product which is being made now in small but increasing quantities.

Limburger—famous (some would say infamous) for its aroma, has many devotees. A small, flat cheese, about 6 by 6 by 3 inches or smaller, it is very soft when ripe and, surprisingly enough, has a mild subtle flavor. Originally imported from Belgium in considerable quantity, practically all the Limburger in this country now is American. Cheese experts say the American variety, made from pasteurized milk, is of high quality and has slightly less aroma than the Belgian.

Liederkranz, in spite of its foreign name, is a strictly American product. It resembles Limburger but is definitely milder. It comes in a somewhat smaller, rectangular foil-wrapped package.

Cheese fanciers who want to know more about their cherished food can read descriptions of 290 different kinds in *Varieties of Cheese*, Bulletin No. 608. For practical hints and recipes on everyday uses for cheese send for *Cheese in Your Meals*, AWI-16. Both are free from the Office of Information, United States Department of Agriculture, Washington 25, D. C.



Here we see three steps in making Swiss cheese: turning over the curd, "harping" it into particles, and testing for curd firmness.



Swiss cheese stays in temperature- and moisture-controlled room 2 to 3 months. Twice weekly it is washed and sprinkled with salt.

Youth serves science

● If you live in these United States, chances are you get from your Government—directly or indirectly—up-to-date scientific help on many an everyday problem. The help may come in a Government bulletin, or relayed by your radio, newspaper, or magazines—the Consumers' Guide, for example.

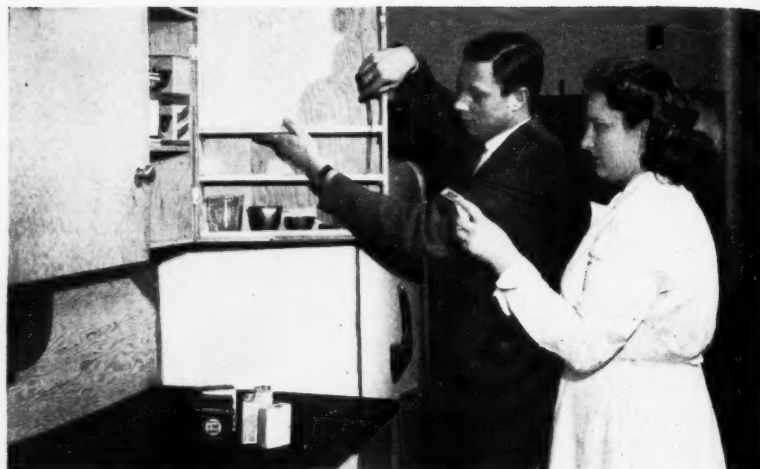
Much of the research being carried on by Government bureaus is entrusted—under direction, of course—to bright young people who have recently been graduated from our schools and colleges.

Splendid work being done by young men and women in the Bureau of Human Nutrition and Home Economics is typical of the contribution which youthful scientists in the various Government bureaus are making to research in the public interest.

Research jobs in the BHNHE are by no means limited to home economists. Home economists with training in nutrition, textiles, household equipment or some other specialty do play important roles. But there are also biologists, chemists, physicists, statisticians, bacteriologists and many other types of scientists in this Bureau.

Small though it is, with a research staff of about 180 persons, the BHNHE is the only Federal agency concerned wholly with problems of the family and the consumer. Its task is to conduct research on consumer use of food, fiber, and other products from America's farms.

Hence the wide variety of studies conducted by the Bureau and the many types of specialists who are carrying them forward. A picture tour into a few of the Bureau's research labs and offices will serve to give an idea of the problems being attacked. At the same time such a glimpse into a Government research bureau will reveal a goodly number of alert young people working to push forward the outposts of useful knowledge.



How to make kitchen chores easier for the homemaker? An architect and housing specialist work on efficient shelf spacing for a kitchen cabinet.



Studying performance of different types of home food freezers, a physicist and household equipment specialist prepare to record food temperatures.



This biologist is about to weigh this rat—one of the "test tube" rats in vitamin research. The animal has been fed on an experimental diet.



How does the food taste? One of the many jobs of these researchers is to sample foods for their eating quality.



This young home economist at the textile laboratory is testing a fabric sample to determine how much sizing it contains.



How well do we eat? To find out, this food economist studies the nutritive value of our food supply.



Specialists develop cooking methods which conserve food value and have good taste and eye appeal.



Aim: To find best processing times and temperatures for home canning. This apparatus records heat penetration.



Using a special recording machine, this young physicist in a textile laboratory tests elasticity of knitted fabrics.



Pointers on Sheets

Despite increased production, supplies are still limited. Wise shoppers will buy only what they need, shop for quality, and take care of the sheets they have on hand.

● Just a minute, Madam Shopper. The time has not yet come to go on an all-out buying spree to replenish your war-torn supply of sheets. The latest word to the wise housewife is:

Make your old bed "linens" do as long as they can be coddled to survive another laundering. It's still sabotage to yield to that hoarder's urge to buy beyond your minimum requirements.

Remember, lots of veterans' families are trying to set up housekeeping without the benefit of prewar hope chests. And even if that thought doesn't stop you, the outlook for better buying days ahead should put a brake on giddy overbuying.

Although production of sheets during the first quarter of this year increased slightly above production during the same period last year, sales have generally kept pace with production. Supplies are still far short of demand.

This means the selection of sheets isn't as good as it should be later when supplies catch up with demand. Just when that will be depends on too many variable factors to say with certainty. Since controls are off the manufacture of textiles, manufacturers will naturally concentrate on the lines that are the most profitable to them.

Expert opinion seems to be that the supply situation for sheets will gradually improve, however, and sometime during 1947 supplies will catch up with demand. Then—and only then—is the shopper likely to find a full selection from which to choose the bed sheets best suited to her needs and purse.

For this reason the canny buyer will refuse to buy just anything she can get, regardless of value or need. She will shop carefully for what she must buy—and for the rest, will hold off for better shopping days ahead.

In order to buy sheets wisely, the shopper needs to know the characteristics of a good sheet and the particular type best suited to her needs and pocketbook.

Following are the characteristics of a good sheet, as set forth by the Bureau of Human Nutrition and Home Economics on the basis of extensive service tests:

A good sheet is firm in weave.

It is practically free from sizing.

It is torn rather than cut from the bolt.

Hems are securely sewed with strong thread and short, even stitches (about 12 or 14 to the inch).

The better grades of combed yarn sheets are made from cotton ranging from about $1\frac{1}{8}$ to $1\frac{1}{2}$ inches in staple length. Shorter fibers of $1\frac{1}{8}$ to 1 inch are used for standard qualities of muslin and fine count sheets.

Aside from these general quality specifications, a number of other factors must be taken into account to get the most serviceable sheet for your money.

Sheets must be long enough and wide enough to suit the user's bed and physique. The life of many an otherwise good sheet has been all too brief because it was too short and so couldn't stand the yanking attempts to stretch it to fit the bed or sleeper.

Then there is the matter of weight and texture. Where hard wear is expected, a heavy muslin is a good choice. Where appearance and luxurious softness is at a premium, percale sheets offer definite advantages. Sometimes light weight results from the fact that the fabric is loosely woven. This makes for poor wearing quality. But if the sheet is closely woven from fine yarn, it should hold up—and the saving in laundry bills should be taken into account in estimating cost.

Price tags, incidentally, are not a good measure of value in judging sheets. A cheap sheet may be no bargain because it's just that—sleazy and shoddy in con-

struction. But then again, a fancy price is no guarantee of quality.

How, then, is a buyer to recognize a sheet that measures up to the general specifications for a good sheet adapted to the particular needs of her family?

Labels which give specific information are the buyer's best assurance that she is getting her money's worth.

An ideal label would tell the following points about a sheet, say the home economists:

Number of yarns per inch; breaking strength, weight and amount of sizing; width and length of sheet before hemming; and whether the sheet is first or second quality.

Even before the war, few cotton sheets on the market were labeled to give all this information. However, some manufacturers gave information about the number of yarns per inch and others gave data on breaking strength while some guaranteed their sheets for so many washings. An in-



Don't iron the life out of sheets. Avoid too hot irons and don't iron folds in sheets.

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creasing number of housewives were acting on the conviction that it is thrifty to buy sheets manufactured by reliable mills that labeled their sheets and stood behind the label.

During the war, the Office of Price Administration, in order to protect consumers from excessive price increases and quality deterioration, tied the prices of the various grades of sheets to definite minimum standards set up for each grade. These standards helped prevent excessive deterioration in the quality of sheets. At the same time minimum standards helped protect reputable manufacturers from unfair competition on the part of irresponsible concerns who had no reputation to lose. As a consequence, OPA efforts to prevent deterioration were more successful with regard to sheets than in other lines where price was not tied to minimum quality standards.

With the lifting of controls, however, *demand-acting-on-supply* is again the deciding factor with regard to quality and price in sheets. This means that Madam Shopper will decide.

If take-what's-offered buyers and price-tag shoppers are in the majority, the result is likely to be quality deterioration as competition gets keener. For then manufacturers will tend to cut prices and quality to get trade. But if buyers shop carefully for value and show their appreciation of brands that give them the quality and information essential for intelligent buying, manufacturers will be on their toes to supply consumers with serviceable sheets.

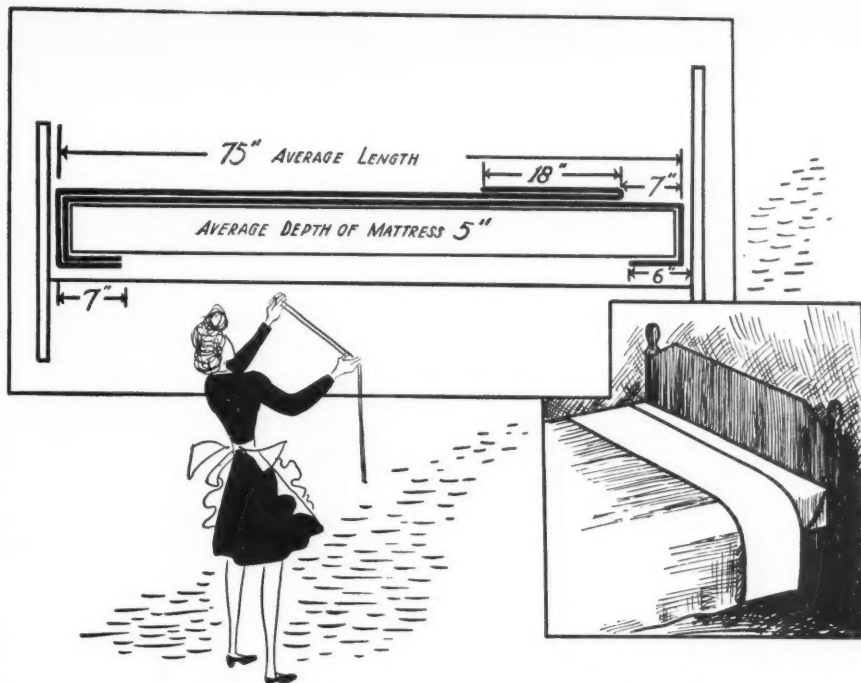
Meanwhile how to choose wisely with such information as may be available?

First of all, the shopper should remember the points of a good sheet and try to check the ones on sale against these specifications.

Thread count, or the number of yarns to the inch—lengthwise (warp) and crosswise (filling)—is an important factor in the serviceability of a fabric. A good wearing sheet has about the same number of yarns in one direction as the other.

By holding the fabric up to a strong light and noting how the warp and filling yarns look, a shopper can get some idea of the evenness and balance of a fabric.

Heavy-weight sheets sturdy enough to stand up under hard usage usually have about 72 yarns per inch in the warp and 68 in the filling. Yet a study conducted by the Bureau of Home Economics some years ago revealed that the thread count in 21 nationally advertised first quality



Buy sheets long and wide enough to tuck under the mattress and turn back over blankets. They feel, look, wear better.

sheets ranged from as low as 59 in the warp and 44 in the filling!

Weight is another factor affecting the serviceability of sheets. If sheets are very light in weight and loosely woven, they wrinkle and are uncomfortable to sleep on, as well as unattractive looking. If sheets are too heavy, on the other hand, they are cumbersome, hard to wash, and expensive to send to the laundry.

In choosing a particular weight of sheet, the buyer's individual preference and needs are the deciding factors. It's smart to find out what particular weight of sheet is best suited to your needs and stick to that.

Buying sheets by weight—that is by the number of ounces per square yard—may sound strange. But it's exactly what the Federal Government and many private institutions do.

Breaking strength is another measure of the wearing quality of a fabric. For this information, the buyer must depend on labels—merely jerking at a sample of cloth doesn't give the answer. If the breaking strengths are given on the labels, chances are that the sheets with the greatest breaking strength will give the best wear.

Perfection of weave is another consideration in buying sheets. To rate a standard or first quality label, a sheet must be practically free from weaving imperfections such as uneven yarns or thick and thin places.

Holding the sheet up to the light helps a buyer spot such imperfections in the weave.

Sheets marked other than first should be sold at a lower price than the standard quality brings.

In buying seconds or run-of-the-mill (ungraded) sheets, a wise precaution is to examine them carefully to see where the defects are. These flaws are usually the weakest places in the sheet. However, some flaws affect appearance only and not wearing quality. Hence some seconds may be good buys.

Sizing is the filler used in manufacturing sheets to give them a smooth finish and to give body to poorly woven fabrics. After a few washings heavily sized sheets turn out sleazy.

It's a good precaution then to look on the label to see if the percentage of sizing is given. The amount may vary from 1 percent in high grade sheets to 25 percent in low grade sheets. Here again a factual label affords the most reliable means of judging sheet quality.

Selvage and hems also affect the wearing quality of sheets. As the selvages receive hard wear, many sheets are made with selvages that are wider and heavier than in other fabrics of similar construction. In a sheet with a tape selvage, for instance, extra yarns are woven in to strengthen the edge.



Tall guys need long sheets. Yanking is hard on sheet and sleeper.

The hems on high quality sheets are turned evenly and closed at the ends. The stitching is fine and threads fastened securely.

While hemstitching is sometimes used to make the hems more attractive, the thrifty buyer would do well to remember that this adds to the cost and shortens the wear of the sheet. Often breaks occur in the hemstitching and the entire hem rips off. Most sheets have a 3-inch hem at one end with a 1-inch hem on the other. Some percale and fine count sheets have a four inch hem on one end. If that's the case, be sure the sheet was an inch longer in the first place to make up for the wider hem. Otherwise you'll be indulging in the luxury of a wide hem at the expense of the length of the sheet.

When buying sheets with colored hems be sure they carry labels guaranteeing that the color is fast.

As bleaching weakens fabric slightly, unbleached sheets are somewhat stronger than others of the same quality that have been bleached. To most people, however, the greater attractiveness of white sheets more than compensates for the slight loss in durability.

Size is another important factor in the serviceability of sheets. They should be long enough and wide enough so that the under sheet can be tucked in well under the mattress all the way around. The top sheet should tuck in securely at the foot and sides of the bed and turn back far enough over the covers to protect them.

Skippy sheets don't look right on the

bed. Worse still they are uncomfortable and don't wear well. A sheet that pulls out of place and wads up is more likely to be torn than one held down firmly and smoothly.

So it's a good rule always to know the size of the sheet you need before you go shopping. If you're not sure, measure the size and thickness of your mattress and allow for generous tuck ins.

Sheets 99 to 108 inches long (torn length) are the most satisfactory for general household use. Satisfactory widths for sheets are: 63 inches for single beds; 72 inches for twin or three-quarter beds; and 81 inches for double beds.

Making Sheets Last Longer

First rule for getting the maximum service out of sheets, then, is to buy them carefully to fit your individual needs.

Proper care of the sheets after they are bought is also essential.

Following are some pointers on the care of sheets:

Sheets wear better if they are turned part of the time so as to have the narrow hem at the head of the bed. That's because the most wear comes between the center of the bed and the pillow. That's the spot where the sheet is rubbed by the shoulders of the person sleeping on it.

Guard against rough places on the bedstead or exposed ends of bed springs which often cause snags and tears. Mattress pads protect both sheets and mattresses.

Avoid use of strong bleaches in laundering. Too hot irons also injure sheets..

Ironing folds down the center of the sheet is also bad. Folds pressed by the iron are further pressed down in storage by the weight of the piled sheets. All this pressure tends to break the threads of the sheet along the fold.

If you are troubled by having your sheets shrink up too short to give good service, try ironing them lengthwise instead of across. Continued ironing in one direction makes the sheet longer that way and shorter the other. Part of the loss of length, however, is due to shrinkage. As sheets are rarely, if ever, preshrunk, allowance should be made for shrinkage when buying sheets.

On windy days take sheets off the line as soon as they are dry. Flapping in a stiff breeze whips out the hems. This damage may be slight at first but becomes serious if sheets snap and crack all day long in a strong wind.

Don't use sheets for laundry bags. This practice subjects them to unnecessary strains—snags, tears, dirt and spots.

Don't put your freshly laundered sheets on the top of the pile and wear them to shreds while the others rest at the bottom of the pile. It's better management to keep all your sheets on the job in turns than to overwork some and let others gather dust on the shelf.

Lots of trouble? At first, perhaps. But soon the essential points for wise buying and care of bed "linens" becomes an automatic part of the thrifty housewife's routine. And a very worthwhile money-saving habit at that!



An ideal label would give the above facts.

Consumers' guide

A few well-chosen herbs

• The wise cook knows her herbs, whether the object is economy or luxury. Yet despite all the scientific progress in cookery during this generation, many modern-day cooks do not know as much about savory plants as did their grandmothers before them.

Fortunately it's not too late to learn. Now is a topping time in fact, since high living-costs put a premium on cooking thrift—and herbs have a witching way of transforming plain everyday dishes into exotic viands.

One excellent method of learning about herbs is to grow them. Indeed, no home garden should be without its plot of savory plants, in the opinion of herb specialists at the United States Department of Agriculture.

The beginner is advised to start by planting a few well chosen herbs. Expensive mistakes can thus be avoided, while the herb amateur masters the fundamentals of herb culture and use before attempting the endless refinements. These refinements, by the way, challenge the best skill of horticultural and culinary connoisseurs and fill volumes of books, ancient and modern, mystic and practical.

What To Plant?

About a dozen kinds of herbs are enough for starting an herb garden, advise the experts. That many are needed in order to provide a suitable array of flavors for use singly and in blends. Many more would likely prove confusing to the novice herbalist, so are not recommended.

A suggested list of herbs for beginners

and tips for growing them are outlined in a recent United States Department of Agriculture publication, *Savory Herbs, Culture and Use*. (In case you're interested, you can get a copy for 10 cents by writing the Superintendent of Documents, Government Printing Office, Washington 25, D. C. for a copy of Farmers' Bulletin No. 1977.)

For a start, the herb garden should include the six herbs which the French appreciatively call "les fines herbes." The six plants which have received the accolade from the renowned cooks of France are: sweet basil, chervil, sweet marjoram, thyme, rosemary, and tarragon.

The complete list of herbs for the beginner's garden follows: (To help the cook use them skillfully after they are grown and harvested, the plants are divided into types.)

Herbs for the Beginner

Pungent herbs: Rosemary, sage, winter savory.

Herbs strong enough for accent: Sweet basil, dill, mint, sweet marjoram, tarragon (French), thyme (English or French).

Herbs especially good in blends: Chervil, chive, parsley, summer savory.

As the gardener becomes familiar with the quirks of herb culture and masters the art of using them skillfully in cooking, additional herbs may be added to the garden, a few at a time. Useful additions to the small herb garden include: Anise, caraway, celery, coriander, costmary, cumin, fennel, garlic, lemon balm, lovage, mints of other varieties and species, Italian broadleaf parsley, and pot marjoram.

Not much garden space is required to provide the average family with an ample stock of savory herbs. Usually one short row or a few feet of a row for each of the annual plants or a half a dozen plants of the perennials will suffice.

Nor is any special aptitude required for growing the ordinary herbs. They thrive under the same conditions as vegetables. A few require a bit of coddling to assure the proper soil-moisture conditions. Sage, rosemary, and thyme, for example, require well-drained, moderately moist soil, while celery, parsley, chervil and the mints do best on soils that retain considerable moisture but have good drainage. The majority of herbs are not finicky, however, growing sturdily under a wide range of soil conditions.

When winter comes, persistent herb gardeners can even move a part of their garden indoors. There's a trick to it though, as the annual varieties of herbs normally "give up the ghost" in the fall after they have blossomed and produced seed. To coax them to grow indoors during the winter it's necessary to plant some of the seed outdoors early enough in the fall so that the new plants can be successfully transplanted before frost. Perennials such as chive, geranium, thyme, mint, rosemary, sage, and sweet marjoram are more easily grown indoors during the winter.

Herb Harvest

This doesn't mean that a winter herb garden is necessary to assure a steady, year-round supply of homegrown herbs. On the contrary, the fragrant harvest—including seeds, leaves, flowering tops, or even roots, as the case may be, of the different plants—can be cured and stored away for later use.

Tender leaf herbs which have a high moisture content must be dried quickly in the dark in order to retain their attractive green color. Among the herbs in this class are basil, costmary, tarragon, lemon balm, and the mints. A touch of sun while drying doesn't affect the color of the less succulent leaf herbs, such as sage, rosemary, thyme, and summer savory. Too long exposure to the sunlight should be avoided even for these, however. As for herb seeds, they should be harvested when mature and thoroughly dried before storing.

Storing has its fine points too. The old colonial custom of hanging bunches of



Some herbs—such as sage, lemon balm, and rosemary—can best be propagated by stem cuttings. Others grow readily from seed. This box is for rooting cuttings.

April 1947

savory plants from the rafters of kitchen or pantry is outmoded. Not so picturesque but more efficient is the present practice of filing the various herbs neatly away in separate and tightly closed containers, designed to keep in the flavor and keep out the light.

Reason behind this system is simple and logical. The flavor and odor of the various herbs is for the most part due to a volatile or essential oil contained in the leaves, seeds, and fruits. If this is permitted to evaporate, then the herbs lose much of their flavor. Sunlight fades the color of herbs, hence the need to store them in the dark or in light-proof containers. For the best results, then, herb culturists are advised to play the miser with their savory plants and lock them away until it's time to cook a tasty dish.

This is not to belittle the use of herbs for their fragrance. Indeed, it was a custom in medieval times to strew the floors of churches and of private homes with sweet-smelling plants. While this was probably done partly in an attempt to blot out the evil odors that resulted from the primitive lack of sanitation, still it's a pretty thought that our ancestors joyed to walk on scented leaves and rubbed their furniture with aromatic herbs. But that's a story in itself, quite apart from the culinary uses of savory plants.

Cooking With Herbs

The tantalizing odor of herbs is, however, an important factor in their use in cooking. We use them among other things to add a pungent or subtle aroma to our foods. But in the days before modern methods of food preservation had

been developed they were used to drown out the odor of putrefaction, as well as to add spice to the food.

Cooking with herbs is an art, say the cooks. Hence it is best learned by patient, painstaking practice, rather than by any cut-and-dried formula. To become a successful herb artiste, interest, imagination, and experimentation are needed.

As with pictures, tastes for herb flavoring vary with individuals. However, long experience has developed certain guiding principles. For example, some herbs blend harmoniously with almost any food, while others blend with only a few. Interesting flavor effects may be obtained by combining a leading flavor with two or three others that mingle with it almost imperceptibly.

For the adventurous cook, herbs offer endless opportunity for dressing up familiar dishes in new and exciting ways. But there are pitfalls, too, as too strong flavors, clumsily blended can result in an unpleasant taste.

They add zest to meats, eggs, and fish, give distinction to soups, character to salads, piquancy to desserts, and a special tang to teas and other beverages

Flavors To Suit Your Taste

Even while abiding by a few simple rules, the cook with a well-filled herb chest is free to create an almost endless variety of new flavor combinations to suit her own particular taste and that of her family.

If she wants her fresh ham roast to masquerade as turkey, for instance, she can rub it with powdered sage before cooking and serve it with a pan of dressing that's flavored with poultry seasoning.

Perhaps, she craves to make an extra special event out of a beef roast. Then she may glamorize it by spreading finely chopped fresh marjoram leaves or powdered dry marjoram over its surface.

Instead of fish, plain and unadorned, she may wish to add a pleasing flavor by using dill butter or finely chopped dill, basil, or tarragon leaves. And she may very profitably add a dash of powdered thyme to her usual clam chowder recipe.

When a bit of change from the familiar egg dishes is desired, an agreeable variation may be achieved with the use of a blend of one of the "fine herbs" used as an accent in combination with one of the less stridently flavored herbs or with just a suggestion of another "fine herb" flavor.

Herbs should not be overlooked in mixing salads or cooking vegetables. Basil leaves, either fresh or dry, give distinction to tomato dishes, cucumbers, and green salads. Fresh anise leaves are particularly good in apple salad. When boiling cabbage or potatoes in their jackets, a few seeds of caraway may be added.

Mints and balms lend a pleasing aroma and flavor to beverages. Curly mint, apple mint, orange mint, spearmint, lemon balm, or lemon thyme, add a pleasing accent to tea, whether it's served steaming or in a tall frosted glass. Or refreshing drinks may be brewed from the herbs alone and the brew of lemon balm or mint quaffed with lemon or sugar.

One of the best ways for beginners to learn to use herbs is by making herb butter. Fresh, unsalted butter is best for this purpose, because it readily absorbs the subtle flavors of the herbs, but salted butter, margarine, pork drippings, and rendered chicken fat can also be used.

If fresh herbs are used, they should be cut finely and blended with the butter. One well-packed level tablespoon of fresh green herbs, such as parsley or chive, is enough to flavor 4 tablespoons of butter. If dried herbs are used, ½ teaspoonful will do the trick. Dried herbs may be allowed to stand for a few minutes with a little lemon juice before mixing with the butter. Let stand for several days in small covered jars in the refrigerator. Before serving on broiled or fried meats, add a touch of lemon juice. Herb butter also adds an interesting variation to the usual flavor of boiled, poached, or scrambled eggs and makes an intriguing sandwich spread, if a dash of lemon is added.



This large herb garden is at the USDA experimental farm at Beltsville, Md. Small herb gardens are usually large enough for family cooking needs.

Close up on the News . . .



New Clothing Developments Studied

Latest answers to the eternal clothing problem were studied by State Extension Clothing Specialists from 41 States and Puerto Rico in an intensive 2-weeks refresher course, February 17 through March 1. After hearing experts from government and industry give their opinions on the clothing outlook at the opening sessions in the Department of Agriculture in Washington, D. C., the group took a quick tour of a number of government research laboratories and some textile plants to get the low-down on new developments.

The flood of new clothing materials and new finishes for old fibers appearing on the market has posed consumers with additional buying problems at the same time it has presented them with a wider range of choice, according to a number of speakers. With so many synthetic textiles on the market, for example, the various fibers are no longer easily identified by sight or simple household tests. Similarly with finishes, the buyer can't tell by looking at a fabric how it will stand up—whether a "flame resistant" finish will survive washing, or a "rain repellant" coat can go successfully to the cleaners, or a wrinkle resistant fabric will only resist wrinkles while it's young.

Importance of factual labels giving this information to aid the buyer in getting the right fabric for her needs and to help her give it the proper care after she buys it was underlined.

Interest of the Extension specialists in the clothing problem stems from the fact that the question is a big one in the lives of farm families. It's a 855 million dollar question, in fact, as measured by clothing expenditures of farm operator families back in 1941. In addition, a large number of farm families have a special interest in general developments in the clothing field, as they produce raw products from which clothing is made—wool, cotton, hides.

Textile Labels PLUS

Consumers must remember to read the descriptive legends which accompany trade-marked labels if they want to know the fiber content of the fabrics they are buying. This is the message implied by a recent decision of the Federal Trade Commission. In allowing the continued use of the trade-mark "Alpacuna" the commission directed that "in immediate connection and conjunction therewith, wherever used, there appear words clearly and conspicuously designating all the constituent materials or fibers therein contained."

The trade-mark name had been used extensively on men's overcoating which contained alpaca, wool, mohair and cotton, but no vicuna fiber.

Dry Milk Tried in School Lunches

Good results have been reported from a recent experiment in the interest of good eating, whereby the Department of Agriculture distributed nonfat dry milk solids to a number of schools in milk deficit areas.

The dry milk was donated primarily for beverage use in schools participating in the National School Lunch Program and only to those unable to obtain fresh fluid milk in their area.

A summary of reports received up to the middle of February indicates that school authorities were enthusiastic about the dry milk program. Georgia teachers, for example, observed that the children ate their lunches much better since milk had been served. Increased participation in the lunch program as a result of including milk with the lunches was noted in another State. Also encouraged by results of the experiment, several States now plan to offer this type of milk to other schools in milk-deficit areas.

Acceptance of the reconstituted milk as a beverage varied widely among the 22 schools reporting—from 56 percent acceptance to 100 percent. Thirteen of the 22

schools reported an acceptance rate above 80 percent while 10 schools reported that 90 percent of the pupils drank the milk.

In cases where the teacher drank the milk and showed signs of liking the milk, response of the children was more favorable than in instances where the beverage was merely handed out to the children. Explanation of the food value of milk also tended to increase the acceptance rate. In schools where a large percentage of the pupils did not accept the reconstituted milk at first, it was found that the record could be improved markedly by adding flavorings to the milk—chocolate, vanilla, fruit juices, spice or syrups, for instance.

However, in Alabama where acceptance of the reconstituted milk was unusually good, ranging from 92 to 100 percent in the four schools reporting, the milk was reconstituted with water and no flavoring was added.

Plans for National Arboretum Progressing

A blueprint for developing the National Arboretum into a great "library of living plants" for use by students and plant scientists throughout the world has been presented to Secretary of Agriculture Clinton P. Anderson by the National Arboretum Advisory Council.

If the plans recommended to the Secretary of Agriculture by the Council, are developed, the National Arboretum would become a clearing house for the some 125 arboretums and botanical gardens scattered throughout the United States and would be available to scientists who could use its facilities for research on hardy economic and ornamental outdoor trees and shrubs.

Although it was established by an Act of Congress in 1927, and located on a 395-acre tract in the District of Columbia, so far only preliminary work has been done in developing the National Arboretum, except for the planting of collections of young, rare plants which are being collected from all over the world.

GUIDE POSTS



Plenty of Pie Room

When building a house, it's well to think of baking a pie—or stirring up a frothy cake, per chance. If you crave home-baked bread, pie, and cake, that is, and want to consider the cook.

Baking requires more working space than any other ordinary day-to-day cooking process. What's more, a liberal space allowance makes the job easier.

A minimum counter surface of 24 by 36 inches is required for preparing baked goods, studies by the Bureau of Human Nutrition and Home Economics have shown. However, an area 24 by 42 inches is more convenient for the cook.

The kitchen is the most used workshop in the farm home. In fact, farm housewives spend between a third and a half of their working time in the kitchen.

Everything but the Squeal

Refrigeration has helped meat packers save everything but the squeal.

To avoid spoilage in the days before refrigeration, most meat animals destined for slaughter had to be shipped alive to points near where they were to be consumed. This method was wasteful. Not only was it expensive to ship the animals such long distances, but also it was difficult to reclaim many of the byproducts because the slaughterhouses were scattered and refrigeration facilities lacking.

Under those conditions it wasn't economically practical to build up the vast byproduct industry that has developed since meat packing became centralized.

Myriad uses made of animal byproducts are outlined in a recent issue of *Domestic Commerce*. Following are some examples:

Not only are the bones of animals used in animal feed, but also small quantities of bone are used in the manufacture of baby food.

The glands—many of them essential to life—are used to make medicines. One of the most familiar uses of gland products is that by persons who have diabetes and need insulin. The pancreatic glands of about 80,000 to 100,000 animals are required to make a single pound of insulin. A pound of insulin goes a long way, however, being sufficient to supply approximately 550 diabetics for 1 year at an average rate of 50 units a day.

Bur Brushed

Had you thought of brushing your best coat with burs? No? It's just as well because you probably wouldn't do a good job of it. But many of our finest fabrics are brushed with burs to produce the soft nap finish which adds so much to their warmth and attractive appearance. The machine-driven steel brushes used to raise the nap of most fabrics do not have enough "give" for broadcloth, camel-hair cloth for topcoats, fine wool blankets and many other industrial fabrics. For these the burs of the teasel plant are used. The stiff, prickly burs are arranged on a revolving cylinder and the hooked spines do their work as the cloth passes over it.

These burs are not ordinary wild teasels, but Fuller's teasel, natives of southern Europe, where they have been textile assistants, as it were, from ancient times. Only about a dozen experienced growers are in the teasel business. Some are produced in Oregon where the climate is favorable, but most are imported. In 1939, the last year before teasel imports from Europe were cut off, we imported 48,962 pounds. During the war a small supply came in from the Argentine.

Parachuting Doctor

How to get a doctor in the mountains, but quick?

Despite all their skill and care in fire

fighting, accidents sometimes happen to fire fighters in mountain wildernesses far beyond the road's end. Also, sickness sometimes strikes suddenly in spots out of reach of motor roads or even pack trails.

To meet this very real problem, the Forest Service has now added a parachuting doctor to its staff. The flying doctor is employed on a consultative basis and will be available to go on call by plane and parachute anywhere in the northern Rocky Mountain Region.

The new "para-doctor" was trained at the Forest Service "smoke jumper" training center.

"Smoke jumpers," by the way, are the brave lads who parachute down to fight forest fires in inaccessible mountain country. They pioneered in learning to jump in wooded terrain—so much so, in fact, that many of the techniques used by the "smoke jumpers" were included in the training of our paratroopers during the war.

Showers to Order

Hops production on many Oregon farms has hopped up 25 to 40 percent above previous yields, thanks to made-to-order showers.

When the hops need a bit of rain, the farmers turn on a sprinkler irrigation system and the plants take a drink. The hops seem to like the synthetic rain and the farmers do too. Today an estimated 5,000 to 7,000 acres in the Willamette Valley are under this system of irrigation, whereas 10 years ago farmers depended on luck and the weatherman to deliver rain when needed. The new irrigation practice is an outgrowth of experimental work done by the Oregon Agricultural Experiment Station.

The larger yields of hops produced by Oregon farmers in 1945 netted them extra cash to the tune of more than \$690,000.

LISTEN TO CONSUMER TIME

Every Saturday—Coast to Coast
over N. B. C. 12:15 p. m. EST
11:15 a. m. CST
10:15 a. m. MST
9:15 a. m. PST

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